Offline Processing of 1x8 data

- **First attempt to process the data in real time**
  - Apr 3, noon : decided on the version of ProductionExe to be run on the Production Farm – 3.14.0int1 with patches
  - Apr 04, 1am: patches applied, executable built, tested and distributed to the Production Farm, processing started
  - SVX and CES clustering turned off
  - Calibration constants: the same with Level3
  - **Apr 04 9:30am: 138 files in the Data File Catalog, 92 processed**
  - Typical event size for one of the first files: 180KBytes(RAW) , 220 Kbytes on output of Production
  - Apr 04 11am: the first processed data started appearing on FCDFSGI2, turned out that KAHUNA server needed to be restarted for people to see the data (this happened later in the afternoon)
  - Apr 04 (around 11pm): the first Production files were spooled to FCDFSGI2
  - Apr 05 (this morning): all the data until run 111216 processed on the Farm, after that run the trigger table has changed (trigger table 1x8_END_1) and we started writing out multiple output streams.
  - One run has been taken with this mode, then the store ended
  - 2nd store: started from 1x8_BEGIN (one output stream), during the owl shift switched to 1x8_END(4 output streams)

- **What did we learn:**
  - We can process the data in real time and make the data available for analysis within hours from when they were taken
  - When the trigger table changes, the contents of a given stream may change (Stream A : **inclusive** for 1x8_BEGIN while electrons for 1x8_END)
  - A unit of data transfer is 1 tape (50 Gbytes) so at low rates the latency can be rather large
  - The files going into the LOOK area (1 per run) contain about 3000 events each, for some express-type jobs (COT threshold scan) we may need more statistics per run
- **Plan the rest of 1x8:**
  - Write inclusive datasets (1 dataset per stream) (rates – the datasets B-D are small, configuration issues)
  - Flush the data to tapes in the end of the next store
  - Discuss the configuration of the output streams for 36x36 next week
- **Status by noon Apr 05:**
  - 8 tapes with the RAW data written (about 350 GBytes)
  - 3 tapes with the Production data written and spooled to the disks on FCDFSGI2
  - 130 Gbytes processed on the Production Farm, 150 GB is the total size of the concatenated output